



## **ABSTRACT**

The present invention relates to the use of alpha (2) macroglobulin (" $\alpha$ 2M") receptor as a heat shock protein receptor, cells that express the  $\alpha$ 2M receptor bound to an HSP, and antibodies and other molecules that bind the  $\alpha$ 2M receptor-HSP complex. The invention also relates to screening assays to identify compounds that interact with the  $\alpha$ 2M receptor, and modulate the interaction of the  $\alpha$ 2M receptor with its ligand, such as HSPs, and methods for using compositions comprising  $\alpha$ 2M-receptor sequences for the diagnosis and treatment of immune disorders, proliferative disorders, and infectious diseases.

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